Reflections ... from page 3

said.

"I expect these new platforms to be busy with new science investigations all over the world," he said.

The DAOF and infrastructure

In addition to efforts to stabilize the center's work force and balance and diversify its program portfolio, Petersen developed the business case and successfully advocated for the Dryden Aircraft Operations Facility, or DAOF.

Located in Palmdale, the facility currently houses the DC-8 and NASA's 747SP Stratospheric Observatory for Infrared Astronomy, or SOFIA. It is expected that other Dryden aircraft will be moved to the facility later this year.

Petersen also made the case within NASA for the center to be awarded supplemental infrastructure funding to sustain critical capabilities. His efforts resulted in the center receiving an additional $25 million annually to sustain Dryden's flight operations and test infrastructure.

New administration, new opportunities

The new presidential administration also appears to offer new opportunities for NASA and potentially for Dryden. Additional funding in the stimulus package recently signed into law includes resources for NASA for climate change research, innovation in aviation and aviation safety.

"I expect an increase in work and opportunities in aeronautics and Earth science," Petersen said.

Another possibility Petersen anticipates as a result of emphasis on environmentally responsible aircraft is a new X-plane to demonstrate some of the next-generation technologies that have been developed or identified by the Aeronautics Research Mission Directorate. Dryden has been supporting flights of the subscale X-48B blended wing body aircraft.

"The blended wing body concept hopefully will result in a mid-scale, 100-foot wingspan, piloted X-plane to improve some of these technologies for the nation," Petersen said.

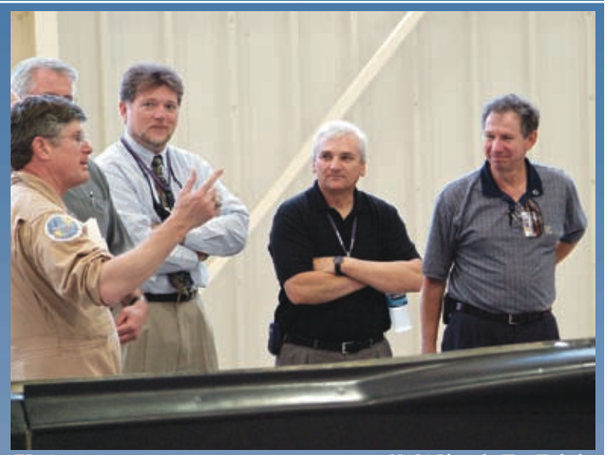
The Orion program also was identified for additional funding in the recently approved stimulus package.

It is unclear how much of the stimulus package funding might make its way to Dryden, but the move signifies support for key NASA initiatives, Petersen said.

Dryden will continue its efforts on the Orion flight test crew module, which is undergoing preparations at the center for the first flight test of the spacecraft's launch abort system later this year. Dryden might have a role in other elements of the effort to return to the moon, possibly including research of a lunar lander and, eventually, support of the larger Constellation program as it moves to operational status in ways similar to how the center provides support to the space shuttle program, Petersen said.

Achievement and transformation

During the past decade, Dryden has accomplished many flight-research firsts, including the flight of the Helios Prototype solar-electric aircraft to a world record 96,863-foot altitude, the flight of the X-43A integrated scramjet vehicle to a speed of Mach 10, and the demonstration of fully autonomous in-flight aerial refueling capability.



ED05 111-1 NASA Photo by Tom Tschida

Petersen, second from right, shows NASA Administrator Michael Griffin around the center. Also visible are, from left, pilot Jim Smolka and Jerry McKee.

"I have a lot of good memories. The most exciting times were those when the center supported first flights of new aircraft, the first time new technologies were tried, or the first time a concept was proven out in flight. Those are the things everybody works for. There have been a lot of milestones of flight here," Petersen said.

Petersen said he also is satisfied with the effort of the past six years to improve the center's performance and the Transforming Dryden efforts of the past two to three years. He believes the workshops were a good way to give Dryden employees the tools to meet the challenges that are common with change.

He hopes that Dryden employees, who have traditionally excelled at meeting short-term challenges, will expand their view to see ahead to longer-term planning, an investment that Petersen said should continue to bring returns for years to come.

For his successor, Petersen suggests the new center director have an eye on what's going to happen two to three years from now and continue to position the center to have the right mix of people and capabilities to meet the challenges and anticipate needs.

The new center director also should work to "maintain a steady approach. Programs will go up and down, schedules will change, budgets will change and staffing will change. Ride through those ups and downs without acting too quickly. Allow time to balance things out."

Petersen is satisfied with his career and where Dryden is today.

"My goal was to put together a solid team and position the center for success. I'm comfortable with accomplishing that goal and that the team will carry on," he said. "In addition to having the right mix programmatically, we have developed the right people with the right skills. It's the people that make things happen."

X-tra is published for civil servants, contractors and retirees of the Dryden Flight Research Center and the center's partners and customers.

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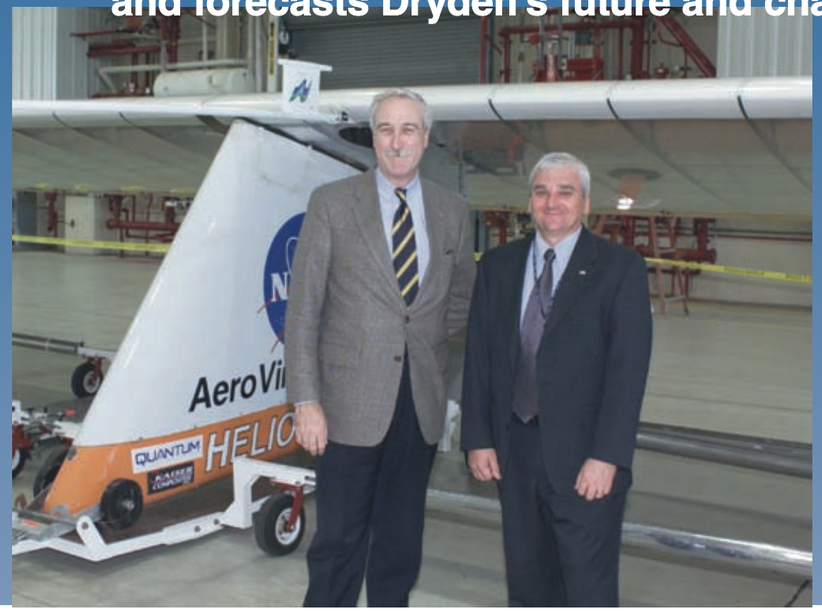
A new chapter

Kevin L. Petersen retires after 37-year career, the past 10 years as NASA Dryden Flight Research Center director.

Reflections

Kevin L. Petersen recalls highlights of his career and forecasts Dryden's future and challenges



Above, *it was a good day when the X-43A had a successful flight March 27, 2004. Kevin L. Petersen, center, talks with Griffin P. "Griff" Corpening, right, X-43A chief engineer, while then Associate Administrator for Aeronautics J. Victor Lebacqz shares the moment.* ***(NASA Photo EC04 0095-33 by Tom Tschida)***

At left*, Petersen and then NASA Administrator Sean O'Keefe stand by the Helios Prototype in 2004.* ***(NASA Photo ED02-0024-08 by Tom Tschida)***

Cover, *Petersen is photographed in his office.* ***(NASA Photo ED05 0099-05 by Tom Tschida)***

Tribute ... from page 6

"He's a very systematic and methodical thinker, who uses good engineering and systems approaches to solving problems.

"What Dryden will miss the most is, Kevin has been a real stabilizing influence for the center. He isn't reactionary. He spends some time and thinks things out. The center has done well under his leadership and grown when it could have been downsized."

Bob Meyer
SOFIA program manager

"Kevin Petersen has been a close colleague of mine for more than four decades and I have seen him in action as a brilliant flight controls and systems and software engineer, a highly competent line supervisor with flight-critical responsibilities, a sophisticated manager in senior positions, and a strong leader and developer of people.

Kevin has an extraordinary combination of instinct, insight and intelligence. He has led the Dryden Flight Research Center during a time of change, and has succeeded in building a strong and talented workforce that is able to take on anything Dryden is given in aerospace and airborne science projects. He can take great pride in that.

He has a character molded by working in almost every type of job at Dryden, starting as a cooperative education student, and eventually leading some of the most challenging aerospace projects flown by Dryden. He fostered excellent relationships with other NASA centers, the industry and the military. This strong collaborative spirit led to one of the most important high-speed flight programs conducted by NASA in its history, the Hyper-X (X-43), which evaluated an advanced configuration and scramjet at Mach 10. This was a result of model collaboration with NASA Langley and engineering excellence at Dryden. This project was as difficult as any ever done at Dryden.

In addition to his technical and management skills and accomplishments, Kevin has the integrity, honesty, and concern for people that is the difference between a good manager and a *great* leader. Kevin always placed a high priority on his own family and personal responsibilities, and as a baseball coach for young people, gave a lot to the community, even when he had incredible demands at work.

The NASA of tomorrow will reap the results of his legacy, and Dryden and would be best served to develop, grow and appoint people like Kevin to lead it in the future."

Kenneth Szalai
Dryden Center Director, 1990-98

"I have found Kevin to be a true leader, and a good manager who has done great things for the center. I believe he is one of Dryden's best center directors. Most people have no concept of the great challenges to the center and Dryden's workforce that Kevin deflected. But he wasn't just reactive. Kevin worked hard to get out in front of potential problems. I believe strongly that many Dryden employees would not have jobs at the center today if it weren't for him. He was extremely effective because of his tireless advocacy, straightforward honesty, technical and managerial credibility, and detailed preparation.

As center director, Kevin built support for the center through networking and one-on-one advocacy rather than a heads-on, steamroller approach. He sacrificed a lot of his personal time to get to know the people needed as allies for the center. Kevin was always, ALWAYS prepared and usually knew more about a subject than the people he was meeting with. When the timing was right, he would make his case with support from many of the decision-makers already in hand. This approach is both time-consuming and very effective. To see the results, just look around at Dryden's facilities and programs. Kevin is a man of action who tries to be proactive instead of reactive and he has positioned Dryden for a bright future.

Kevin has a very human side that most people rarely get to see. He really cares about the Dryden family and the individuals who make it up. When he would learn of a personal tragedy or health problems, Kevin was often visibly shaken. You could see the concern on his face. And, he would ask us to see if there was a way the center could help. In my own case, I was acting Deputy Director when I found out I had prostate cancer. Even though I was in the middle of a major action item from (NASA) Headquarters, Kevin told me not to worry about work and to make health my priority."

Larry Schilling
Former Associate Center Director for Operations

"His contributions at the helm of Dryden over the years have been truly significant in keeping the center at the forefront of aerospace flight research, test and development, both nationally and internationally. Dryden has been extremely fortunate to have someone who has come up through the ranks and understands not only the critical technology but also the complex personnel issues and expertise required to keep Dryden both competitive and productive in a very difficult time and environment."

Cal Jarvis
Retired Dryden Aerospace Projects director

Success ... from page 6

engineer on the three-eighths-scale F-15 Remotely Piloted Research Vehicle, the F-8 Digital Fly-By-Wire and the Highly Maneuverable Aircraft Technology projects.

He later served in multiple supervisory and management positions at Dryden within the Research Engineering Division. He provided multidisciplinary support to a variety of research programs in flight dynamics and controls, structural dynamics, and flight systems. Programs he supported included the F-18 High Angle-of-Attack Research Vehicle and the X-29 Forward Swept Wing technology demonstrator aircraft, for which he was chief engineer.

Petersen headed the center's National AeroSpace Plane project office from February 1992 to November 1993. He was then selected as the center's acting deputy director and was appointed deputy director in January 1996. Petersen was named the center's director on Feb. 9, 1999.

Petersen was awarded NASA's Exceptional Achievement Medal in 2004 for his contributions to the agency. He also has been the recipient of NASA's Exceptional Engineering Achievement Medal, NASA's Exceptional Service Medal, NASA's Outstanding Leadership Medal and NASA's Equal Employment Opportunity Medal.

Petersen graduated from Iowa State University in 1974 with a Bachelor of Science degree in aerospace engineering and earned a Master of Science degree from the University of California, Los Angeles, in 1976, specializing in control systems.

He is a fellow of the American Institute of Aeronautics and Astronautics.

ED08 0044-07 NASA Photo by Tom Tschida

The Stratospheric Observatory for Infrared Astronomy is one of the programs that came to Dryden while Petersen was Dryden center director. Above, SOFIA Program Manager Bob Meyer, at left, explains details of the flying infrared observatory to city officials from Palmdale. From right are Bob Curry, Petersen, Palmdale Mayor Jim Ledford, Palmdale Aviation and Aerospace Commission ChairmanVauneld Adams and Palmdale Councilman Tom Lackey.

Career of Success

Dryden offered opportunities

By Jay Levine
X-Press Editor

Center Director Kevin L. Petersen's opportunities and experiences enticed him to stay at Dryden throughout his 37-year career.

He began his work at Dryden in 1974 as an aerospace engineer and worked his way up from researcher to management and then to center leadership.

His work at the center dates back even before then to his three cooperative education experiences. He started in the acoustics area on the Short Take-off and Landing, or STOL program and then on to the YF-12 program in the areas of flight dynamics and controls.

It can be challenging balancing the demands of work with those of home, Petersen said. He has worked to maintain a balance and has advocated to center employees that they also strive to maximize opportunities at work, but also to concentrate on the ones at home.

"In the earlier part of my career, when the children were younger, I spent more time with my family. In the jobs I was in, it was achievable because I didn't have as much travel. As the kids grew up and I advanced at work, time demands were greater at work," he said.

In retirement he plans to focus on family again as well as tackling some home projects, gardening, exercise and travel throughout the United States.

Early in his career at Dryden, Petersen worked as a research

See Success, page 7

Petersen's attributes are noted

Here are some thoughts and reactions by people who have worked with Center Director Kevin L. Petersen.

"Kevin's service to NASA exemplifies what's great about the people who make up America's space program – he's served with distinction and helped lead the agency aeronautics efforts into the 21st century."

Chris Scolese
NASA Acting Administrator

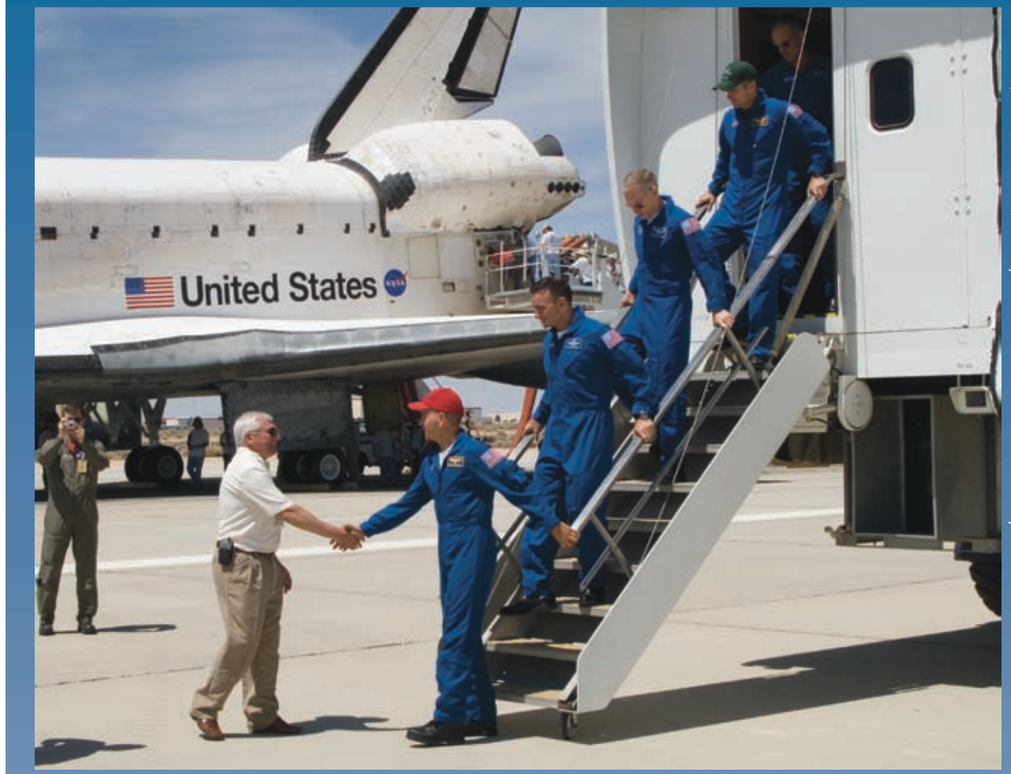
"Kevin is the hardest working, most dedicated Dryden employee I have met. He has been the right person at the right time for the political and economic times we faced over the past 10 years. His efforts in transforming Dryden into a more flexible, dynamic and diverse organization will continue to benefit the center long into the future."

David D. McBride
Dryden Deputy Center Director

"He is intelligent, politically savvy, patient and calm during storms. Nothing ruffles his feathers. He takes it all in stride and that's a valuable quality when facing some of the pretty rough times we've had. Kevin set the tone. "We were lucky to have him as our center director because he believes in flight research and had invested himself in the center – a whole career. I'll miss a good mentor and friend."

Gwen Young
Dryden associate director for management

See Tribute, page 7



At left, *Dryden Center Drector Kevin L. Petersen welcomes the crew of STS-117 home in July 2007. Atlantis and its crew ended their 14-day journey to space at Edwards Air Force Base and was prepared at Dryden for return to the Kennedy Space Center in Florida. Edwards is the primary backup site for landing a space shuttle when the weather is not favorable in Florida.*

ED07 0137-10
NASA Photo
by Tony Landis

By Jay Levine
X-Press Editor

Center Director Kevin L. Petersen sees progress, achievement and a bright future for Dryden.

"Dryden has a very bright future and this is a good time for transition," Petersen said of his decision to retire.

For the past 10 years he has served as center director, and has the longest tenure of any current NASA center director. Petersen attributes his longevity – 37 years – at the center to the unique and focused mission of one of NASA's smaller centers.

In a recent survey made to identify key Dryden projects and personnel, survey respondents noted other reasons for his success. Petersen was cited as a Dryden key contributor for his work on the F-8 Digital Fly-By-Wire program earlier in his career and as center director. Nominators called Petersen "a great center director" and the "friendliest center director at NASA." Nominators also recognized him for his ability to "focus on bringing us the right project activities for Dryden."

Petersen sees the change and diversification of work and skills as one of the center's key achievements during his leadership. The center's skill mix has been changing in response to what's happening in the nation by diversifying the type of work the center does and where the center's dollars come from.

Dryden's key funding was primarily in NASA aeronautics and space shuttle support. Now, while aeronautics research and shuttle support still comprise a portion of Dryden's budget, it is a much smaller portion and balanced with major projects supporting all four of NASA's mission disciplines – environmental and space science, space exploration, human spaceflight and aeronautics, Petersen said.

"My attempt to stabilize the workforce and achieve a healthy workforce level was a key challenge," Petersen said.

Partnerships

Another key factor in the center's success is its partnerships, he said. For example, during the past decade work has shifted from the Defense Advanced Research Projects Agency and the U.S. Department of Defense-supported X-planes. While there are still projects in that arena, new projects feature more science missions with an expanding customer base that includes such partners as the National Oceanic and Atmospheric Administration, the U.S. Forest Service and science organizations.

An example of these new partnerships is seen in the new opportunities that are becoming available for the science community with the acquisitions of a civilian Predator B that the center has called Ikhana, and the Global Hawk autonomous aircraft.

Northrop Grumman's cost sharing with the Global Hawk is an example of future partnerships that are beneficial to NASA and the company, Petersen said. Northrop Grumman officials are looking to test new experiments and components on the Dryden Global Hawks that were transferred from the Air Force. The aircraft are early prototype models of the Global Hawks used for the development program.

The Ikhana and Global Hawk are the only aircraft of their type available to non-military users and therefore there is a demand to test various experiments on the Dryden testbeds, Petersen said.

The first Global Hawk mission scheduled for this summer will spark scientists' interest in things they might not be thinking of today, he

See Reflections, page 8

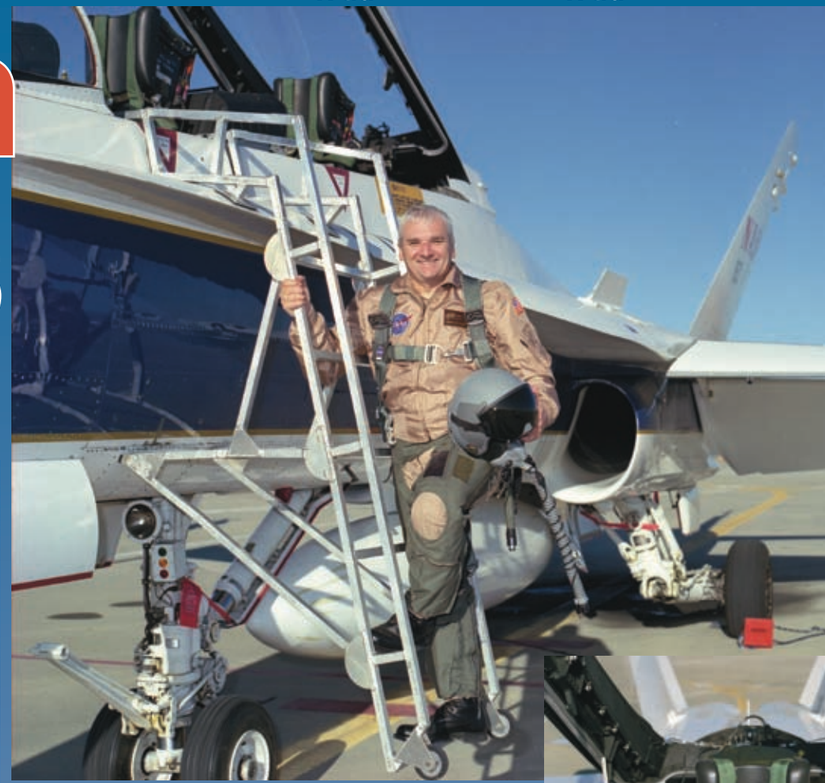
Through the decades

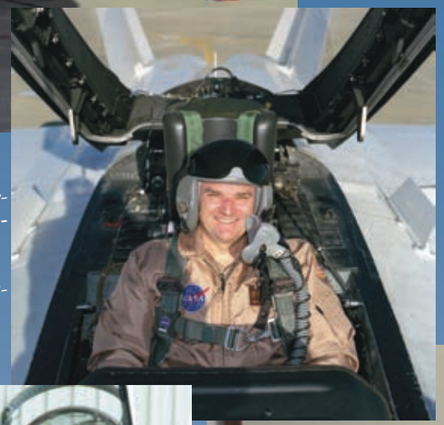
A look at Kevin L. Petersen's 37-year career in photographs

EC80 37946 NASA Photo

***Above**, Dryden Center Director Kevin L. Petersen is pictured in the front row at right. The front row also includes, from left, Kenneth Szalai and Bob Kempel. In the back row are, from left, Bob Noscoe, Larry Schilling and Dick Larson. The group earned a Highly Maneuverable Aircraft Technology back-up control system team award.*

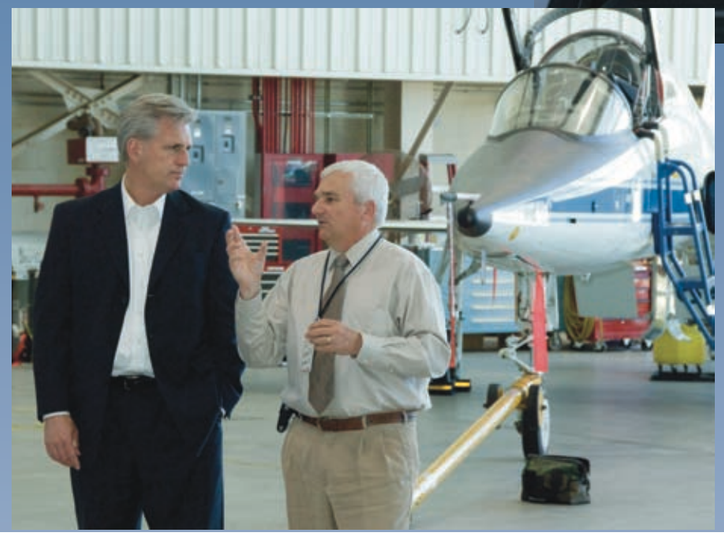
At right**, Petersen is pictured in 1982 **(NASA Photo EC08 18584)** and in 1986 upon receiving the Outstanding Professional Award, runner-up. **(NASA Photo EC86 33358-02)

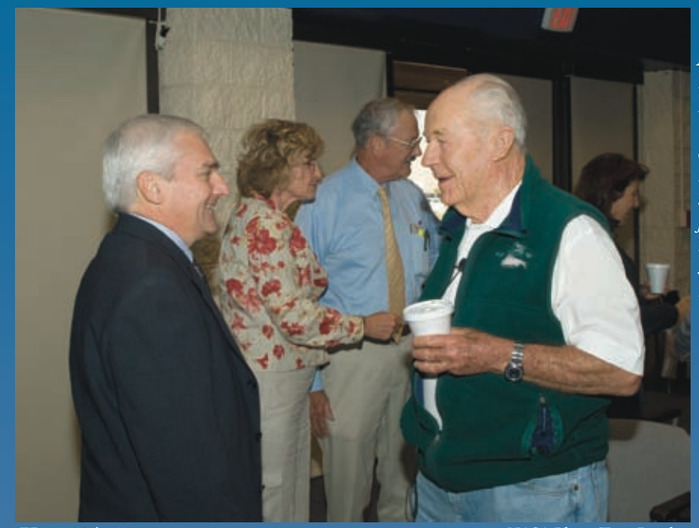




Above and at right**, Dryden Center Director Kevin L. Petersen prepares for a flight in the back seat of a Dryden F/A-18. **(NASA Photos EC05 0258-10 and EC05 0258-6 by Tony Landis)

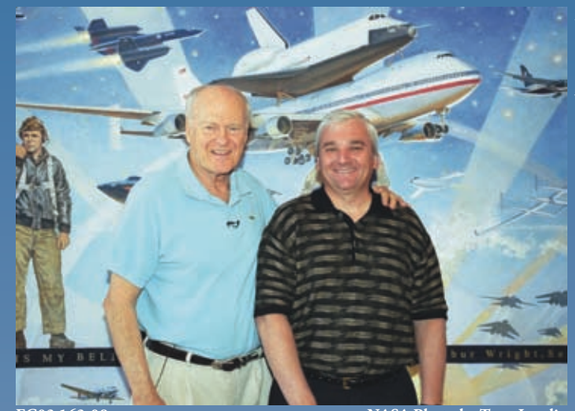
Below**, Petersen gives a tour to U.S. Rep. Kevin McCarthy (R-Bakersfield), left. **(NASA Photo ED08 0083-07 by Tom Tschida)





ED07 0214-08 NASA Photo Tony Landis

***At left**, Petersen talks with retired Brig. Gen. Chuck Yeager. Yeager had come to Dryden to talk about highlights of his flying career, which included the first supersonic flight in the Bell X-1.*



EC03 163-08 NASA Photo by Tony Landis

***At left**, Petersen stands with artist Bob McCall, who painted the mural behind them. The mural is entitled "Celebrating One Hundred Years of Powered Flight, 1903-2003." The mural is displayed in the lobby of Building 4800.*

EC92 06013-01 NASA Photo

***At left**, Petersen had a number of positions at Dryden during his 37-year career. Here, he is seen with a model of the X-30, which was called the National AeroSpace Plane. He was Dryden project manager and became Dryden deputy center director following his service in that position.*